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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,478	12/10/2003	Yoshihiro Kobayashi	1232-5228	7673

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EXAMINER	
LAM, HUNG H	

ART UNIT	PAPER NUMBER
2615	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/733,478	KOBAYASHI ET AL.	
	Examiner	Art Unit	
	Hung H. Lam	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 February 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 February 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendments, filed on 02/18/2005, have been entered and made of record. Claims 13-14 are newly added. Claims 1-14 are pending.

In review of Applicant's amendment to Figs. 4 and 5, objections to Figs. 4-5 are hereby withdrawn.

Response to Arguments

2. Applicant's arguments see Amendment (Remarks), page 8, filed 02/18/2005, with respect to the rejection(s) of claim(s) 1-14 have been fully considered but they are not persuasive. The amended claims are rejected in view of the same reference as cited in the previous Office Action.

The Applicants argue that Park (US-5,477,271) fails to teach or suggest that a level of weighting is changed in a second area, which is outside of the first area, which is placed substantially at a center of the focus detection area. The Examiner respectfully disagrees. Park specifically teaches a digital camera wherein the focus area is regulated such that the central weighting area is emphasized (Figs. 5A-5B; Col. 6, Ln. 1-7; both central area of the two figures are set to 1) and the sub-areas are set randomly (Fig. 5A; Col. 5, Ln. 1-4. Park teaches that a level of weighting value in a second area is changed from 0.5 to 0 in column 6 lines 2-8). Furthermore, Applicants argue that Park fails to teach or suggest that a level of weighting is independently set in horizontal and vertical directions of the frame. The Examiner respectfully

disagrees. Park teaches that the weighting value of the sub-area is set randomly (Col. 5, Ln. 1-4) and varied from 0 to 2 corresponding to the control signal (Col. 6; Ln. 9-40; Tables 1-2). Figs. 5A-5B shows that the vertical weighting value is changed from 0 to 0.5 while the central weighting value or the horizontal weighting value remains unchanged (Col. 6, Ln. 1-8).

In response to applicant's argument that the Sekine reference fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "a level of weighting is changed in a second area which is outside of a first area which is placed substantially at a center of the focus detection area") are not recited in the rejected claim 12. the Applicant is reminded that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In view of the above, the Examiner believes that the broadest interpretation of the present claimed invention does in fact read on the cited reference for at least the reasons discussed above and as stated in the detail Office Action as follows. This Office action is now made final.

Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-11 and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Park (US-5,477,271).

Regarding **claim 1**, Park discloses an image sensing apparatus which comprises:

an image sensing device (an image sensor is inherently included in a video camera; col. 2, lines 50-54) which generates an image sensing signal (col. 3, lines 1-12) by photo electrically converting light from an object;

a weighting device (44, Fig. 4) which weights a signal component corresponding to a focus detection area in a frame (detection areas 62 and 64, Fig. 5A) sensed by said image sensing device (col. 5, line 56 – col. 6 ll. 40);

an evaluation value acquiring device (accumulator 46, error detection 48, Fig. 4) which acquires a piece or pieces of information (col. 5, lines 30-33; col. 6, lines 41-58) from an output from said weighting device (44),

wherein said weighting device changes a level of weighting in a second area which is outside of a first area which is placed substantially at a center of the focus detection area (Col. 5, Ln. 1-4; Col. 5; Ln. 55-63; Col. 6, Ln. 1-40; Park teaches a video camera wherein the weighting value in a respective sub-area is set randomly; the weighting value calculating portion 44 determines respective weight values for focus areas. Focus area is regulated such that the central weighting area is emphasized; In Fig. 5A-5B, both central area 62 of the two figures are set to a higher weighting value than the peripheral area 64).

Regarding **claim 2**, Park discloses the apparatus wherein said weighting device (44) changes in the level of weighting so that the level of the weighting increases from a peripheral

portion (64) to a central portion of the focus detection area (col. 6, lines 1-40; the weighting value in the central portion 62 of Figs. 5A-5B is set at a greater value than the peripheral portion 64; weighting value in the sub-area are set randomly and varied in according to the Shift-Left/ Right -Shift control signal of tables 1-2).

Regarding **claim 3,** Park discloses the apparatus wherein said weighting device independently sets the level of weighting in horizontal and vertical directions of the frame (Col. 5, Ln. 1-4; Col. 6, Ln. 1-40; the weighting value 1, 0.5 and 0 of in Figs. 5A-5B are set randomly in horizontal and vertical directions corresponding to the Shift-Left/ Shift- Right control signal of tables 1-2).

Regarding **claim 4**, Park discloses the apparatus wherein the focus detection area comprises a plurality of focus detection areas (col. 4, lines 66-67; col. 5, lines 1-5), and said weighting device(44) performs relative weighting between the adjacent focus detection areas (col. 5, lines 55-64; col. 6, lines 1-40; Figs. 5A-5B).

Regarding **claims 5-8**, they are method claims corresponding to the apparatus claims 1-4, respectively. Therefore, claims 5-8 are analyzed and rejected as previously discussed with respect to claims 1-4.

Regarding **claim 9**, Park discloses a program (col. 7, lines 1-5) causing a computer to execute an auto focus method defined in claim 5.

Regarding **claim 10,** Park discloses a storage medium computer-readably storing a program (storage medium is inherently needed to store software) defined in claim 9.

Regarding **claim 11**, all the limitations can be found in claim 1. Claim 11 further requires that the weighting device (44) can independently set weighting factors in horizontal and vertical directions (Col. 5, Ln. 1-4; col. 6, lines 1-40; the weighting values can be changed corresponding to control signal (see table 2 and Figs. 5A-5B). Park also teaches the apparatus further comprising a driving device (focus driver 50, Fig. 4) which drives a focusing lens to an in-focus point (col. 6, line 58-62) on the basis of a signal acquired by said evaluation value acquiring device (col. 6, lines 40-62)

Regarding **claim 13,** Park discloses the apparatus further comprising a driving device (focus driver 50, Fig. 4) which drives a focusing lens to an in-focus point (col. 6, line 58-62) on the basis of a signal acquired by said evaluation value acquiring device (col. 6, lines 40-62).

Regarding **claims 14**, the claim is a method claim corresponding to the apparatus claims 13, respectively. Therefore, claim 14 is analyzed and rejected as previously discussed with respect to claims 14.

5. Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Sekine et al. (US-5,561,498).

Regarding **claim 12**, Sekine et al. disclose an image sensing apparatus, which comprises:

an image sensing device (sensor 12, Fig. 6a) which generates an image sensing signal by photo electrically converting light from an object (col. 5, lines 1-10);

weighting device (Figs. 6a; distance measuring gate ckt 112) which weights a signal component corresponding to a focus detection area in a frame sensed by said image sensing device (col. 5, line 56 – col. 6 line 9; col. 6, lines 40-67);

an evaluation value acquiring device (Fig 6a; AF control 11) which acquires a piece or pieces of information required to control a focusing lens (lens 7) from an output from said weighting device (col. 6, lines 12-32); and

a driving device (AF driving ckt 10 and motor 6, Fig. 6a) which drives the focusing lens to an in-focus point on the basis of a signal extracted by said evaluation value calculation device (AF control 11, Fig. 6a; col. 4 lines 56-67; col. 6, lines 25-33).

wherein said weighting device perform relative weighting processing between adjacent distance measurement frames (Figs. 2 and 3a-3d; Col. 4, Ln. 24-32; Col.5, Ln. 40 – col. 6 ll 9; col. 6 ll. 33-59; various weighting processing are performed as the distance measuring frame tracing the object).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung H. Lam whose telephone number is 571-272-7367. The examiner can normally be reached on Monday - Friday 8AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's primary, NGOC YEN VU can be reached on 571-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HL
07/11/05

NGOC YEN VU
PRIMARY EXAMINER